DOCUMENT RESUME

ED 341 289 FL 020 059

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TITLE Some Thoughts on the Study of Sign Language Talk.
PUB DATE 91
NOTE 16p.; In: Communication and Discourse across Cultures and Languages. AFinLa Yearbook 1991; see FL 020 041.
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Deaf Interpreting; *Discourse Analysis; Ethnography; Finnish; Foreign Countries; *Sign Language
IDENTIFIERS Finland

ABSTRACT

Preliminary results are described of an attempt to analyze the talk of the Finnish deaf signing community from the perspective of conversation analysis (CA). CA is described as an empirical approach to the study of spoken conversation deriving from the field of ethnomethodology, which itself emerged as a reaction to traditional sociology in the 1960s. Video data for this study was collected at a local social club for the hearing impaired. It was found that groups of signers needed to be recorded in ways that would not have been appropriate for groups of speakers. Interpretation of the signing was dependent on the quality of the image, and was further complicated by the fact that there was not a suitable impressionistic notation system for transcription. It is concluded that ultimately the study of sign language will not only reproduce the findings of studies of spoken language and reveal phenomena peculiar to sign, but it will also yield new perspectives on language use in activities that are difficult to capture in speech environments. Contains 34 references. (LB)

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SOME THOUGHTS ON THE STUDY OF SIGN LANGUAGE TALK

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Introduction

The study of the organisation of conversation and discourse in general is firmly based on the analysis of the speech and writing of hearing communities. In contrast, this paper will discuss the preliminary results of an attempt to analyse the talk of the Finnish deaf signing community from the perspective of conversation analysis (CA). In reference to the foundational principles and practices of CA, the paper will discuss the practicalities of data collection, transcription and the first tentative analyses.

Background

In the 1960s, the 'gestures' of the deaf community in America were established in the academic world as forming a language that complied with all the requirements set for spoken languages. Stokoe's innovative and daring work proposed that signs could be described in terms of three parameters: location, handshape and type of movement (Stokoe 1960). Since then, much linguistic research has been undertaken, but, as yet, very little work has been conducted on the interactive organisation of everyday and natural talk of native signers. For a popular account of the development of the recognition of sign as a language and some recent events in American deaf history, see Oliver Sacks (1989). Research collections include Siple (1978), Klima & Belugi (1979), and Lucas (1989), which are mainly concerned with American sign language, while Kyle & Woll (1985) is a more cohesive collection of British sign research.

Along with many other countries, as research on home sign languages spurted after the American revelation, Finnish sign language (FiSL) became the object of linguistic attention in the 1960s and 1970s. In 1973, a major Finnish sign language picture dictionary was produced, including over 3000 signs

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(*Viittomakielen kuvasanakirja* 1973). Later studies in the 1980s have concentrated on specific features of the grammar of sign - the manual gestures, modifications of the sign, use of the face, body and eyes, etc. (Rissanen 1985, Pimiä & Rissanen 1987). In response to the recent work on sign, a completely revised dictionary is currently being produced in Helsinki (Malm 1989). Unfortunately, much of the Finnish research has concentrated on the south of the country and can give the appearance of a linguistically and socially cohesive community across Finland (of approximately 6000 native deaf signers). The influence of this research on the social organisation of the deaf community and the structure of FiSL has yet to be fully explored, as has the variation of sign language across Finland.

Conversation analysis

Before discussing sign language, a brief introduction to the principles and practices of conversation analysis will follow so that the methods upon which we draw are clear. Conversation analysis (CA) is an empirical approach to the study of spoken conversation deriving from the field of ethnomethodology, which itself emerged as a reaction to traditional sociology in the 1960s (Garfinkel 1984). It is claimed that conversation is a routine and complex accomplishment carried through by almost all members of society with great skill and transparent ease. The central goal of conversation analytic research is the description and explication of the competences that ordinary speakers use and rely on in participating in senseful conversation. Meaning is not built into the codes of language as in structural accounts, nor is it to be found in the relation of cognitive representations to that which is represented. Meaning is constructed in situ by interactants who are

> simultaneously engaged in fine-grained real time co-ordination of speaking turns tracked predominantly in terms of surface structural features and... organising their actions in terms of publicly accountable normative expectations bearing on the nature and design of their turns at talk. (Heritage 1989:26.)

The early work in the 1960s has been taken up increasingly in Europe, especially in Britain, but the original pioneering work of Sacks has been generally unavailable except for a few monographs transcribed by Gail Jefferson and the original published papers. However, recently some of the transcribed

lectures have been published (Harvey Sacks 1989), and all of them will be available later in full. Useful summaries of CA can be found in Levinson (1983), Atkinson & Heritage (1984), Heritage (1984, ch. 8), and Button & Lee (1987). The classic work, much referenced and misinterpreted, is Sacks et al (1978), which was first published in 1974.

In this approach the analysis of conversations is strongly 'data-driven'. CA painstakingly studies how talk is methodically produced by members in orderly ways that exhibit that orderliness for one another. The methodology avoids the use of interviewing techniques, the use of field notes or pre-coded schedules, the use of native intuitions to invent examples, and the use of experimental manipulation or directing behaviour which may restrict the range and authenticity of the activities which are elicited. Instead, the interest is in revealing the

> organised procedures of talk as they are employed in real worldly contexts between persons in real relationships whose talk has a real consequentiality and accountability (Heritage 1989).

Some record of the phenomena is essential in order to study it in detail. However, the record must be of the details that were meaningful for the participants, and constitutive of the activities under investigation. CA has shown that audio and video tapings are adequate for investigating spoken conversation on the telephone and in copresence. A recording allows repeated viewing of the event and consequently peer group ratification of a finding. Also, an impressionistic transcription system has evolved, which is now quite complex (Psathas & Anderson 1990). For example, details of overlapping speech, particular speech production characteristics like pace and mid-phrase cutoffs, and split-second timings of pauses are notated. This renders the talk 'strange' (but readable) and thus can help expose the everyday accomplishment that is taken-for-granted.

The early interest of CA was in everyday mundane conversation, particularly on the telephone, with a parallel interest in institutional talk in comparison to the general core findings about multi-party conversations. In the last ten years, work has gradually located talk in the context of the body and other activities that participants might be engaged in. This research is still in its infancy but suggests that language, body and perception are intricately interwoven in the

interactive achievement and coordination of those practical activities (Goodwin & Goodwin 1987).

I should note at this point that I use the words 'talk', 'say', etc. to refer to the signing activities that deaf people engage in together because those are the terms that they themselves use to describe and refer to their own use of sign. Besides the translation glosses for signs that are offered, signs for some of these activities occur around the mouth region, eg. the signs glossed as SAY, ORDER, and TALK. Unfortunately, some researchers are actively constructing an analytic discourse in which the deaf community do not talk. For example:

> Conversation is not talk's sole form, but it does seem to be its most general one, composing many social scenes, leaking into others, and probably providing the source from which other forms of speech and writing derive. There is no doubt that some societies are more silent, some more terse, some more formal than others. Some communities - the deaf, for example - do not talk at all. (Moerman 1988:3.)

But rather than reserve these terms for spoken language interaction, I will use them in the broad sense of language-rich interaction in practical everyday contexts. Why should it be described in a different way? If deaf people do not converse, nor have a rich set of activities of talking, then what do they do?

In contrast to conversation analysis, discourse analytic studies of sign language have been reported in Hall (1983), Wilbur (1983), Prinz & Prinz (1985), Roy (1989) and Nowell (1989). Also, an initial analysis of features of dyadic turn-taking in sign from the perspective of signal theory has been reported in Baker (1977) and this analysis forms the backbone of almost all of the later analyses of sign discourse. It should be noted that because of the animal language controversy and the hypothesized links between gesture and the origin of language, some research even purports to study conversational interaction between chimpanzees (Fouts et al. 1984).

Issues

Most of the foundational work on conversation has focused on British or American spoken culture. Some work has been undertaken on Thai, German, Chinese, Dutch, and Japanese, for example. Also, the Finnish spoken language

has recently been subjected to analysis using these techniques by Hakulinen (1989) and others. Given the extensive work of CA on British and US talk, then what can be transferred to the study of sign rather than to the study of another spoken language?

This of course raises the tricky issue of conversational universals, just as hypothetical linguistic universals become popular with the advent of comparative linguistic descriptions of many languages. It has been claimed by Moerman (1988) that Thai conversation is organised in ways similar to American conversation with respect to the organisation of overlap and first reference to non-present persons. But the applicability of CA methods to sign conversation raises more problematic issues because of the difference in modality as well as culture. What is also relevant if one attempts to equate speech and sign is that the techniques developed for collecting, rendering and analysing spoken talk may not be appropriate for sign or may be problematic in their routine application. The remainder of this paper will consider the collection of video data, the rendering of interesting features of sign talk, and the relation of these aspects to the developing analysis of sign talk.

An issue that implicitly runs throughout our studies revolves around the competence of the analyst in the community being studied. Neither of the researchers on the study reported here were competent at sign language. Our task is much like that of the ethnographer in a strange culture, who must describe that culture as an outsider. Moerman (1988) argues that CA can help ethnography, and he illustrates it with a documentation of some aspects of Thai culture through an interactional analysis of settings of talk. We hope to follow this methodology in our studies until such time as native deaf signers take up the study of their own culture from this perspective.[1]

In summary, the theme of this paper is that very little research has been carried out on the interactional aspects of sign language in a community of signers with a distinctive deaf culture. One must not only study the language structure, but

[1] We expect that this is more likely if some research on sign language itself is undertaken in order that training and a model example is available for deaf researchers, who would not otherwise have access to training sessions involving spoken talk.

how it is constituted, maintained and used in real, practical settings that the deaf must encounter and actively construct in their community.

Data collection

Given the strong emphasis in CA on naturalistic empirical methods, data was collected by recording sign talk on video in real social settings without intervention. Our data collection began when permission was granted by the leader of the deaf community in Oulu to video in the deaf club, which is held on one weekday night every week. This social event is attended by many members of the deaf community in Oulu. None of the situations recorded were contrived or staged. However, the collection of sign talk data poses its own special problems because of visual, cultural and technical dimensions. Thus, much potentially useful data was interrupted or corrupted. The camera's directionality and field of vision posed problems for the consistent recording of the events. Peripheral or unengaged people often crossed the path of the camera lens or blocked out other participants. Also, participants may move to positions that are hard to contain within the scope of the view-finder whilst maintaining the whole group in sight as well.

Also, many recordings contain only brief fragments from longer engagements whose trajectory was only to be found in just prior activity or the prior activities of the whole group, neither of which had been recorded. We found ourselves with records of many fleeting instances of sign talk rather than a stable grouping of two or three signers engaged around a dinner table or on the telephone. This was not expected nor encouraged. It is a dynamic that we came across in the setting encountered. We went to see if we could pick up some natural examples of sign conversation from within the setting, but found instances of previously unnoticed phenomena occurring within unplanned participation frameworks.

After a few sessions it suddenly became obvious that not only was participation continually changing and shifting but that access to these interactional dynamics was not too problematic. The videoing of these events was not planned out beforehand; it developed as a result of the contingencies of doing it at the time. Thus we brought two cameras to the social gathering and both filmed what was

interesting at the time. If we had been recording a similar social gathering in the hearing world, the methods and resulting interests would have been quite different. For example, Goodwin (1981) describes his data collection practices. In regard to capturing speech, he pre-positioned microphones at various locations which were unintrusive. These techniques pose certain constraints on what is acceptable data and the scope of analytic interests as well. However, in the deaf club we found that because sign talk is constituted almost wholly in a visual-spatial world, we could record phenomena that are normally unavailable to the analyst of spoken talk without intrusive practices. For example, in a spoken gathering the tracking of talk within the space occupied and the procuring of intelligible records would require mobile and intrusive microphones that would clearly pick up the relevant speech of the participants out of the general hubbub of the gathering. But, in the deaf club the phenomena are available on video, which is not so 'unnaturally' intrusive. By this I mean that many of the members of the club have video cameras, often they film at the deaf club or on other occasions, the filming takes place at a distance; thus, the manner in which filming was undertaken by us is similar to their own methods. However, microphone tracking is not so common among the lay public. Of course, the visibility of filming and the sensitivity of signers to the public space around them could mean that the camera was more intrusive than expected. This has yet to be determined, but initial observations suggest that signers are often conscious of the camera, but equally, on other occasions, the behaviour of participants or those in the vicinity is not in accord with a display of acknowledgement of camera rights, eg. a bystander moving out of the way, staying in a visible position, etc.

Thus, we found that we recorded and then began to systematically record groups of signers in ways that we would not have entertained for groups of speakers. Now the analysis of the relation of talk to the physical and bodily activities of the group was at least a faint possibility, if not feasible. For example, we could record signers who were at a great distance apart, mobile groups, the unhindered to-ing and fro-ing of participants between 'focused' engagements within the gathering. Our activities were guided by the selection of interesting looking engagements or spaces and the tracking of the relevant features or participants of an event through its course. If we had restricted our interest for practical reasons to dyadic interaction or had constructed settings within which 'natural' talk was to be elicited, eg. getting two participants to

converse at a prearranged time and place, the everyday constitution of talk and the features noted above would have been unavailable.

It became apparent in the analyses that interpretation of the signing was dependent on the quality of the image, the recording distance from the signers, the focusing range, and the monitor size. The interpreter found it hard to determine the quality of a sign or the sign itself from the play-back. Only later did we modify our practices to engage in team filming, and thus obtain two views on the same talk activity, which provided better quality close-up images. For videoing the visual aspects of the production of spoken talk, Goodwin had mounted the camera on a trolley and selected shots of participants as groups or close-up shots of individuals. Our method was to roam as a team using handheld cameras recording the participants from views that would allow the systematic details of their conduct to be recovered at a later date.

Transcription

When moving from the visual record to the transcription of interesting features of the conduct of signers, we find a problem because the deaf community has no natural writing system on which to draw upon, and also researchers have not yet agreed upon a uniform and comprehensive notation. Quite a few systems are currently being developed, some with analytic interests at heart (Prillwitz et al. 1989) and some aimed at general purpose use (McIntire et al. 1987, Sutton 1990).

The difficulties in developing a suitable impressionistic notation system are manifold. If it is to be based on a natural writing system, and preferably an alphabetic one which relates to features of the production of a language, then we are in trouble. Writing systems for spoken languages have the benefit of several thousand years of cultural history. In the West we are painstakingly enculturated into the alphabetic writing system with its different orthographies and scripts at an early age. But because of the nature and history of sign language an alphabetic writing system is not so easy to tailor. A simplified account that borrows the vocabulary of traditional linguistics without criticism may indicate why this is so from a linguistic rather than a social or political point of view.

It is often claimed that all spoken languages contain meaningful units made out of sequential groupings of a reasonably limited set of meaningless contrastive sounds or phonemes - from 11 to over 100 depending on the language - with allophonic variations. Leaning heavily on this phonological feature, an alphabetic writing system and a range of cultural practices have been developed such that spoken words in many languages can be written down given the human capacity to do so, ie. alphabetic orthographies relate to phonological structures of a language, though historical contingencies may corrupt the purity of the relationship. It is claimed that signs, however, are made up 'phonologically' of large numbers of meaningless manual 'cheremes', with much 'allophonic' variation, that form simultaneous bundles, though sequential features are also present in some signs; in addition, there are many non-manual features such as eye gaze, body position, mouth and facial movements which are intrinsic to some signs. It appears that sign languages that have been studied are foremostly made up of a very great number of minimally contrastive cheremes that have yet to be fully determined. These are visibly articulated simultaneously to form meaningful signs. Note that in speech, however, the articulatory apparatus is largely hidden from view, except for lip, tongue and facial movements and their visibility is not required to understand the language.

I believe that though the accounts above are primitive and suspect (cf. Coulmas 1989), they can help us to understand the difficulty in developing a viable orthography of sign, especially if we try to adopt wholesale the techniques developed for spoken languages. A way to think of the difficulty is as follows. In spoken language the sequences of phonemes relate in a complex way to hearable words, whereas in sign language the cheremic bundles predominantly make up the visible sign itself. Each chereme in sign is a primitive element which combines simultaneously with others to form signs, whereas in spoken languages it is the bundle of articulatory elements - a phoneme - that is the primitive element which combines in sequences to form words. All spoken languages can be described in this way and thus the alphabetic system is potentially applicable to all, though it is more appropriate for some languages than others. To dare mention a parallel to speech in sign language: if we map the phonological organisation of speech onto sign, most signs would involve the production of sequences of units drawn from a limited set of meaningless bundles. Alternatively, if we map the organisation of sign onto speech, all

hearably distinct simultaneous articulations of articulatory features would encompass the majority of words in that hypothetical language. No spoken language in the world has yet been discovered to have this feature, ie. instead they can all be reasonably described in terms of sequential groupings of a small number of hearably distinct phonemes. This is one reason why a comparable alphabetic system is difficult to develop by analogy with spoken languages because no similar-form spoken language exists from which we can draw a parallel. Of course, it would be possible to have a pictographic or a pleremic system - a script which operates principally on lexical or morphological levels, eg. Chinese - but it would be nice to have a written form that affords the same advantages for a community as the alphabet or a cenemic script - on phonological and phonetic levels - does, eg. compatible with technology, learnable, economic and giving a good correspondence between signs and graphemes.[2]

In summary, it is a historical fact that a writing system for sign language has no precedent and the linguistic analysis of sign languages is in its infancy. Thus it is not at all obvious what features of any, let alone a particular sign language, could be relevant or essential to include in a system that is based on some linguistic properties of sign language, eg. phonological or morphological. Ultimately, a new set of cultural and technical practices for writing sign language down will have to be developed within the deaf community itself, as hinted at by Coulmas (1989:43): "Whenever illiterate peoples wanted to write, they usually borrowed the written language of a neighbouring people. Only gradually did bilingual individuals grasp the possibility of writing their own mother tongue, too".

Returning to the issue at hand, the premise of Jefferson's system (Psathas & Anderson 1990) in conversation analysis is that an impressionistic notation using standard or pseudo-phonetic orthography is readable by lay people who can read English. This is not currently a valid premise for sign language

[2] I am not quite sure if a case can be made for the economy of sequential patterns over simultaneous articulation at the phonological level in respect to the development of an alphabetic system of writing - ie. that sequential patterns allow a more limited set of meaningless units to be put to work combinatorially than with the simultaneous articulation of obligatory sets of units. Anyway, the user of a writing system has other interests - than isomorphism - which dictate a different sort of economy.

research for the reasons given above. An additional complication is that because there is not yet a natural sign writing system used within any deaf community in the world, then all research must be reported and circulated in a foreign language - Finnish or English in our case - that is not so easily available to the native community for comment or development.[3]

Analyses

Our analyses are currently tentative and cursory. We proceed slowly because of the need to check every step as there is no background of validated and accepted sign language research on which to draw. In addition, we must work with and through a native signing interpreter - an expensive and time-consuming process - and the deaf community. The main principle though is that analyses will proceed from a rich stock of natural data and they will not be dictated solely by preordained goals. Our findings will arise from close attention to the video recordings. Interesting phenomena are revealed and thus become the focus of more detailed and comprehensive analyses. A sketch of some of our interests will follow, but a detailed analysis with examples and transcriptions will appear in a forthcoming paper.

One particular vein that is developing is based around the classic work of CA, namely the systematics of speech exchange in spoken talk, or turn-taking. It is obvious that deaf signers must organise their participation in sign talk activities, but is it organised in the same way as for spoken conversation? Turn-taking is a pervasive phenomena in any speech exchange system, and can also be found in any interactional activity in which turns at participating must be coordinated. CA has investigated this phenomenon and found regularities in the way in which people achieve the orderly distribution of turns-at-talk. CA proposes that turn-taking operates on a turn-by-turn basis organising the transition to next speaker with the materials at hand. The system provides a motivation for organising conversation, so that only one speaker speaks at a time. Overlap does occur but it is an ordered phenomenon explicable in terms of orientation to the rule set.

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[3] It is of course possible to disseminate the research results in video form with signed documentation but this is not valid for the hearing community at present and lacks some of the advantages of the written form.

It has become clear from our data that the organisation of turn-taking in sign talk is complex and predicated on the creation and maintenance of mutual monitoring in copresence that endogenously informs the turn-taking. Unlike spoken talk, signers must look at each other in order to 'follow' one another, and thus it must be explained why it is that speakers and hearers in sign talk often are not looking at each other. In larger groups than dyads, participants often have distributed access to the participatory actions and activities of others, and this has an effect on the constitution of turn-taking and participation frameworks. In speech, verbal overlap or backchannel activity is invariably a mutually monitorable event, hearable by those present (with degrees of volume, awareness, recognition and directional perception) at one and the same time. Mutual orientation is implicated by and displayed within the turn-taking system. But in sign talk, simultaneity of signing by different speakers does not guarantee overlap nor unanimous orientation to possible overlap (even in dyadic talk) - overlap is revealed as a phenomenon requiring multi-party focused attention which can only be oriented to if noticed, and it may not be noticed by all. Thus participants may discover at a later time that a turn has been or is in progress that may have co-occurred with their or anothers turn. A mutually ratified floor must be continually addressed, and attending to each other requires lots of explicit work, such as tapping, waving, use of vibration, as well as sign onset. It appears that these constraints and resources result in a different organisation of turn-taking from spoken talk. The turn-taking system must be predicated on the coordination and management of mutual monitoring, and possibly on the visibility and spatial configurations of the participants themselves.

Another interesting line of analysis, which was brought out in the thoughts on data collection, is concerned with mobile engagements or gatherings with constantly changing focused engagements. It is clear that much talk is conducted in both the hearing and deaf worlds in many situations which are not like two party 'focused' face-to-face conversations. What percentage of our lives is spent in each pursuit is maybe not determinable, but it is surely not satisfactory to preclude the relevance of these other situations just for practical reasons. Heath (1986:175) mentions the problem of the analysis of visual aspects of large group activities, eg. meetings, classrooms, because of the small scope of the camera technology to include sufficiently detailed images of the event. Besides this there are other reasons why there is no research on large group

dynamics with respect to talk, eg. in parties, meetings, and that is because of the technical difficulties in recording and tracking the speech of mobile and disparate groups adequately. Much talk occurs in the hubbub of other activities that potentially impinge on the construction of that talk, either conversational or incipient talk in the context of a primary other activity. In respect to sign talk, it is hoped that analyses of small focused engagements in the context of a larger gathering will be able to be developed from the data.

Conclusion

This paper has discussed some sketchy thoughts resulting from the first attempts to analyse natural sign conversation from the perspective of conversation analysis. Ultimately, the study of sign language will not only reproduce the findings of studies of spoken language and reveal phenomena peculiar to sign, but it will also yield new perspectives on language use in activity which are difficult to capture in speech environments. Much can be learned about linguistic prejudice, the inadequacies of conversational models, and the creativity of situated language users from such a study.

Acknowledgements

This work has been conducted with Pirkko Raudaskoski, and it was only possible with the kind assistance of the deaf community and also those hearing people who come into contact with that community. Special thanks are due to Oulu deaf club, Sirpa Suomela and Anne Hämäläinen.

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